

REMARKS

By way of background, in a Decision on Appeal dated April 7, 2009, rejections of claims 1-21 under § 112, second paragraph, were vacated, rejections of claims 1-7 and 16-21 based on Joffe and Mathur under §§ 102(b) and 103(a) were affirmed, and rejections of claims 8-15 based on Mathur under § 102(b) were vacated. But the Board then rejected claims 8-15 by issuing a new ground of rejection under § 103(a) in light of Mathur. The prosecution of the present application was reopened pursuant 37 C.F.R. 41.50(b)(1) which provides that the Appellant may reopen prosecution before the Examiner of the rejected claims where the Board issues its Decision on Appeal with new grounds of rejection (without filing a Request for Continued Examination). Accordingly, amendments to claims 8-15 were filed and reconsideration was requested. In response, the present final Office Action was issued. Prior rejections of claims 1-7 and 16-21 as well as rejections of claims 8-15 based on the new ground were maintained. In response, by way of this RCE, claims 1-9, 12-14, and 16-21 have been amended. No claims have been added or canceled. Support for amendments can be found throughout the specification and claims, and at least on page 9, lines 16-20, page 11, lines 10-14 and 24-26, and page 20, lines 13-16. No new matter is added. Claims 1-21 are now pending, and reconsideration is respectfully requested.

REJECTIONS OF CLAIMS 8-15 UNDER 35 U.S.C. § 103

The Office Action rejected claims 8-15 under 35 U.S.C. § 103(a) “as being unpatentable over Mathur” (U.S. Patent No. 6,424,658). In response, claim 8 has been amended, and now recites in pertinent part:

“a plurality of ports configured to exchange data with external devices wherein the data has a selected one of a plurality of word-widths;

a memory including a plurality of banks, each bank having an array of memory cells arranged as a plurality of rows, wherein each row comprises a plurality of memory cells forming a predetermined word-width that differs from at least the selected word-width, and

wherein the memory further comprises circuitry configured to select one of the plurality of rows in response to a received address;

a buffer associated with one of the plurality of ports and configured to assemble the data with the selected word-width, ... wherein the buffer is further configured to cooperate with the circuitry of the memory to bridge the selected word-width and the pre-determined word-width;

wherein the switch is configured to enable the selected word-width to be programmatically provided to the switch.”

Mathur teaches a store-and-forward network switch that uses an embedded DRAM packet memory. However, the disclosed organization of the embedded DRAM packet memory does not teach or suggest at least the recited “shared memory” with “a memory including a plurality of banks, each bank having an array of memory cells arranged as a plurality of rows, wherein each row comprises a plurality of memory cells forming a predetermined word-width that differs from at least the selected word-width, and wherein the memory further comprises circuitry configured to select one of the plurality of rows in response to a received address;

a buffer associated with one of the plurality of ports and configured to assemble the data with the selected word-width, ... wherein the buffer is further configured to cooperate with the circuitry of the memory to bridge the selected word-width and the pre-determined word-width ... ”

Therefore, for at least these reasons, amended claim 8 is submitted to be allowable over Mathur.

Claims 9-15 depend from claim 8, and are submitted to be allowable for at least the same reasons discussed above with respect to claim 8.

REJECTIONS OF CLAIMS 1-7 AND 16-21

Claims 1, 2, 7, 16, and 17

The Decision of Appeal maintained the rejection of claims 1, 2, 7, 16, and 17 under 35 U.S.C. § 102(b) as being anticipated by Joffe (U.S. Patent No. 5,440,523).

Amended independent claims 1 and 16 recite substantially similar features in relevant portions. As such, claim 1 will be used as a representative claim to argue the allowability of claims 1 and 16. Amended claim 1 now recites in pertinent part:

“a plurality of ports configured to exchange data; and

a shared memory configured to enable the exchange of data of a selected one of a plurality of word-widths ... wherein the shared memory is further configured to enable the selected word-width to be programmatically provided to the shared memory, and

wherein the shared memory includes:

an array of memory cells arranged as a plurality of rows and a single column having a width equal to a predetermined word-width that differs from at least the selected word-width;

circuitry configured to write ... to read ..., wherein the circuitry is further configured to bridge the selected word-width and the pre-determined word-width.”

Joffe teaches a multi-port shred memory which includes multiple ports for transferring data, a plurality memory access buffer, and an interconnection matrix (see, e.g., Abstract). However, the organization of Joffe’s ports, buffer and interconnection matrix does not teach or suggest at least the recited “shared memory” with

“an array of memory cells arranged as a plurality of rows and a single column having a width equal to a predetermined word-width that differs from at least the selected word-width;

circuitry configured to write ... and to read ..., wherein the circuitry is further configured to bridge the selected word-width and the pre-determined word-width.”

Therefore, for at least for the reasons discussed above, amended claim 1 is submitted to be allowable over Joffe.

Claims 2 and 7 depend from claim 1 and are submitted to be allowable for at least the same reasons discussed above with respect to claim 1.

Claim 16 recites, in relevant portions, substantially similar features as claim 1 and is submitted to be allowable for at least the same reasons as discussed above with respect to claim 1.

Claim 17 depends from claim 16 and is submitted to be allowable for at least the same reasons discussed above with respect to claim 16.

Claims 3 and 4

The Decision of Appeal also maintained the rejection of claims 3 and 4 under 35 U.S.C. § 103(a) as being unpatentable over Joffe.

Joffe does not teach or suggest the features discussed above with respect to claim 1, from which claims 3 and 4 depend. Thus, claims 3 and 4 are submitted to be allowable for at least the same reasons discussed above with respect to claim 1.

Claims 1-3, 5-8, 10-17, and 20

The Decision of Appeal further maintained the rejection of claims 1-3, 5-8, 10-17, and 20 under 35 U.S.C. § 102(b) as being anticipated by Mathur.

As discussed above, claim 8 is submitted to be allowable over Mathur.

Amended independent claims 1, 8, and 16 recite substantially similar features in relevant portions. As such, for at least similar reasons, claims 1 and 16 are also allowable over Mathur.

Claims 2, 3, and 5-7 depend from claim 1 and are submitted to be allowable for at least the same reasons discussed above with respect to claim 1.

Claims 10-15 depend from claim 8 and are submitted to be allowable for at least the same reasons discussed above with respect to claim 8.

Claims 17 and 20 depend from claim 16 and are submitted to be allowable for at least the same reasons discussed above with respect to claim 16.

Claims 4, 9, 18, 19, and 21

The Decision of Appeal further maintained the rejection of claims 4, 9, 18, 19, and 21 under 35 U.S.C. § 103(a) as being unpatentable over Mathur.

Mathur does not teach or suggest the features discussed above with respect to claim 1, from which claim 4 depends. Thus, claim 4 is submitted to be allowable for at least the same reasons discussed above with respect to claim 1.

Mathur does not teach or suggest the features discussed above with respect to claim 8, from which claim 9 depends. Thus, claim 9 is submitted to be allowable for at least the same reasons discussed above with respect to claim 8.

Mathur does not teach or suggest the features discussed above with respect to claim 16, from which claims 18, 19, and 21 depend. Thus, claims 18, 19, and 21 are submitted to be allowable for at least the same reasons discussed above with respect to claim 16.

CONCLUSION

It is submitted that claims 1-21 are in a condition for allowance. Accordingly, a Notice of Allowance is respectfully requested. If the Examiner has any questions concerning the present paper, the Examiner is invited to contact the undersigned at the phone number set forth below.

If any fees are due in connection with filing this paper, the Commissioner is authorized to charge the Deposit Account of Schwabe, Williamson and Wyatt, P.C., No. 50-0393.

Respectfully submitted,
SCHWABE, WILLIAMSON & WYATT, P.C.

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